Healthy Eating

NOVA SCOTIA

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Healthy Eating Nova Scotia was developed by:

The Healthy Eating Action Group of the
Nova Scotia Alliance for Healthy Eating and Physical Activity,
in partnership with the Office of Health Promotion.

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Summary

January 2005

Nova Scotia's rates of diet-related chronic conditions, such as cancer, type 2 diabetes, cardiovascular disease and obesity, are among the highest in Canada. Similarly, provincial rates of diet-related risk factors such as obesity, abnormal lipids and high blood pressure, are serious public health problems. Research has shown that improving nutrition can help prevent these and many other chronic conditions. At the same time, growing food insecurity and other social and economic changes are making it more difficult than ever for Nova Scotians to choose healthy eating.

Healthy Eating Nova Scotia is a strategic plan to address these and other nutrition-related health issues. The document provides a framework for comprehensive action on healthy eating, one of the four areas of emphasis recommended in the Nova Scotia Chronic Disease Prevention Strategy. It is the first provincial food and nutrition strategy developed by an active partnership of government and non-government organizations, private corporations and professional associations, in consultation with the broader community. The strategy was produced through a collaborative process led by the Healthy Eating Action Group of the Nova Scotia Alliance for Healthy Eating and Physical Activity.

Why a healthy eating strategy? Good nutrition is essential for health and well-being, and making healthy choices is more difficult than it has ever been before. As a result, illness due to nutrition-related causes is costing the province vast and growing amounts of money. These costs are expected to increase very rapidly in Nova Scotia as a result of two powerful forces: our rapidly aging population, and the soaring costs of treating chronic conditions with medication and high-tech equipment. Immediate, strategic and innovative action is called for to avoid a financial and health care crisis.

Healthy Eating Nova Scotia outlines four priority action areas: breastfeeding, children and youth, fruit and vegetable consumption, and food security. These priorities were identified as nutritional "best buys" after a thorough review of the research literature.

Good nutrition is essential for health and well-being, and making healthy choices is more difficult than it has ever been before.

Breastfeeding

Babies experience very rapid growth and development in the first six months of life. The numerous benefits of breastfeeding are well known. For the child, it has been shown to reduce the incidence of asthma, eczema, ear infections, gastrointestinal disease, sudden infant death syndrome and a variety of childhood infectious diseases. It also promotes optimal brain development and provides protection against life-threatening illnesses for premature infants. Researchers now also recognize that breastfeeding plays an important role in preventing obesity and the many related chronic diseases later in life. For the mother, breastfeeding has been shown to reduce the risk of breast and ovarian cancers. Experts recommend that healthy infants receive *only* breast milk until six months of age and that ideally, breastfeeding should continue (with other foods) for up to two years and beyond. Yet in Nova Scotia, nearly one-third of children are never breastfed, and most of those who do receive mother's milk do so for only a few weeks.

Objectives

1. To increase initiation and duration of breastfeeding.

2. To increase the number of health care organizations that have adopted the Ten Steps to Successful Breastfeeding.

3. To increase the number of public and community health agencies that have adopted the Seven Point Plan for Protection, Promotion and Support of Breastfeeding.

Children and Youth

Eating habits are developed early in life. Some evidence suggests that food habits established before age five are maintained throughout adulthood. Children's eating habits are influenced by their experiences at home, in child care settings and at school. They are also heavily influenced by media messages. Although little is currently known about the nutrition status of young children in the province, increasing rates of type 2 diabetes and obesity are indicators that something is seriously wrong. A variety of strategies are proposed to create environments that foster healthy eating among young people at home, at school and in child care settings.

Objectives

1. To improve eating patterns of children and youth, based on Canada's Food Guide to Healthy Eating.

2. To increase the availability and affordability of healthy foods in child care, school and other child and youth settings.

3. To increase knowledge about food and nutrition among parents, teachers and caregivers.

4. To increase skills for encouraging the development of healthy eating practices in the early years, among parents and other caregivers of young children.

Fruit and Vegetable Consumption

A rapidly growing number of studies show the protective role that vegetables and fruit play in preventing chronic diseases, including heart disease, stroke, type 2 diabetes, hypertension and many cancers, particularly those of the gastrointestinal system. As a result, increasing fruit and vegetable consumption has become a priority in chronic disease prevention strategies worldwide. According to the latest Statistics Canada figures, less than one-third of Nova Scotians over age 12 eat the recommended 5-10 servings of fruit and vegetables every day. People who experience food insecurity are even less likely to eat the recommended number of servings. A variety of strategies are proposed to support increased consumption of fruit and vegetables both at home and in various food service operations.

Objectives

1. To increase consumption of fruit and vegetables among all Nova Scotians.

2. To increase the availability of fruit and vegetables in community, work, school and health care settings.

3. To improve access to and affordability of fruit and vegetables for low income populations.

Food Security

Food security has been defined as the ability of all people, at all times, to have access to nutritious, safe, personally acceptable and culturally appropriate foods, produced (and distributed) in ways that are environmentally sound and socially just. The Canadian Community Health Survey suggests that 17% of Nova Scotian households (over 133,500 people) experienced food insecurity at some time in 2000/01.

At the individual level, food security is about access to food. This implies that food is available close to home and that people can afford to buy it. Research has shown that Nova Scotians who live on social assistance or minimum wage earnings cannot afford to eat well, no matter how carefully they choose and prepare food. The same study also showed that the cost of a basic, nutritious food basket is considerably higher in smaller grocery stores and in rural Nova Scotia. Supermarkets and farm markets, where food tends to be less expensive, can be very far from home. Unless people have access to healthy food, strategies aimed at encouraging them to eat more fruit and vegetables, breastfeed their infants and help their children develop healthy food habits can have only a very limited impact.

Objectives

1. To increase the proportion of Nova Scotians who have access to nutritious foods.

2. To increase the availability of nutritious, locally produced foods throughout the province.

Recommendations

Healthy Eating Nova Scotia is part of a coordinated, worldwide movement to reduce chronic disease through better nutrition. As part of this worldwide effort, *Healthy Eating Nova Scotia*, together with the provincial tobacco and physical activity strategies, will provide a blueprint for improving health and preventing chronic disease in Nova Scotia.

Leadership

1. The Healthy Eating Action Group recommends that the Office of Health Promotion and all Alliance member organizations endorse the four priorities and 12 objectives of Healthy Eating Nova Scotia, and take concrete steps to support these within their organizations.
2. To ensure coordination and reduce duplication, the Healthy Eating Action Group recommends that the Office of Health Promotion:
   - 2.1 act as lead agency for coordination of activities to achieve these objectives
   - 2.2 create one additional position for a public health nutritionist in each district health authority, to ensure coordination and support at the local level
   - 2.3 support shared ownership and accountability for Healthy Eating Nova Scotia, by maintaining the Healthy Eating Action Group as the coordinating body for the strategy
   - 2.3 establish a formal link between this coordinating body and the Office of Health Promotion Advisory Committee.
3. The Healthy Eating Action Group recommends that the Office of Health Promotion and all Alliance members allocate appropriate resources to support implementation and evaluation of the healthy eating strategy.

Public Policy

4. To ensure that food security is a consideration in all public policy decision making, the Healthy Eating Action Group recommends that the Government of Nova Scotia adopt the food security policy lens for use across government departments.
5. The Healthy Eating Action Group also recommends that the Office of Health Promotion work with partners to develop food and nutrition policy frameworks for food service operators in publicly funded institutions, such as schools, hospitals and post-secondary institutions.

Knowledge Development and Translation

6 The Healthy Eating Action Group recommends that the Office of Health Promotion develop an evaluation framework for Healthy Eating Nova Scotia.

7 To ensure that the proposed national food and nutrition surveillance system addresses the four priority areas, the Healthy Eating Action Group recommends full provincial participation in the development of this new national system.

8 The Healthy Eating Action Group recommends the development of a strategic research agenda, to engage researchers, institutions and agencies in working collaboratively on each of the four healthy eating priorities.

9 To increase the use of evidence in implementation of the strategy, the Healthy Eating Action Group recommends that the Health Promotion Clearinghouse be used to communicate the following types of information to stakeholders province-wide:

- 9.1 results of relevant Nova Scotia research, surveillance and evaluation
- 9.2 best practices in policies, programs and other initiatives that promote healthy eating.

Health Communications

10 To support implementation of Healthy Eating Nova Scotia, the Healthy Eating Action Group recommends that the Office of Health Promotion work with partner organizations to:

- 10.1 develop clear and consistent nutrition messages
- 10.2 implement a communication and social marketing strategy based on these messages.

Community Development and Infrastructure

11 The Healthy Eating Action Group recommends that the Office of Health Promotion engage provincial stakeholders from multiple sectors to develop action plans for each of the four priority areas, with shared accountability for implementation.

12 The Healthy Eating Action Group further recommends that Public Health Services take the lead in developing strategic partnerships for implementing Healthy Eating Nova Scotia in each health district.

13 To support the implementation of Healthy Eating Nova Scotia at the community level, the Healthy Eating Action Group recommends that the Office of Health Promotion and other Alliance members:

- 13.1 provide opportunities for staff and volunteers to learn more about strategies for health promotion and program evaluation
- 13.2 create a long-term fund to support local community-based projects that reflect best practices in the priority areas.

About Healthy Eating Nova Scotia

Healthy Eating Nova Scotia was produced through a collaborative process initiated by the Healthy Eating Action Group of the Nova Scotia Alliance for Healthy Eating and Physical Activity. The Nova Scotia Alliance for Healthy Eating and Physical Activity is a diverse and informal network of agencies and individuals with an interest in promoting healthy eating and physical activity. Considerable support for the development of the strategy was provided by the Nova Scotia Department of Health, the Office of Health Promotion and Cancer Care Nova Scotia, the convening organizations for the Alliance.

An early draft of this document was submitted to the Office of Health Promotion in October 2003 as part of the Nova Scotia Chronic Disease Prevention Strategy. The Healthy Eating Action Group then held a broad, province-wide consultation to discuss the proposed healthy eating strategy with stakeholders. Meetings were held in each of the province's nine health districts. Participants came from schools, hospitals, public health, health charities, universities, youth health centres, food service companies, community heath boards, family resource centres, district health authorities and the Department of Health's provincial programs. They included dietitians, nurses, parents, volunteers, researchers, food producers, food service managers and recreation directors. Participants in the consultation enthusiastically supported the proposed vision and the four priority areas of focus. They provided examples of current initiatives that support these four priorities. They also provided a variety of suggestions for implementing the strategy. Their comments and suggestions were used to shape *Healthy Eating Nova Scotia*.

Sincere thanks are due to the Nova Scotia Office of Health Promotion, the Unit for Population Health and Chronic Disease Prevention at Dalhousie University, and all the people and organizations who worked together to develop the strategy, in particular:

- Canadian Cancer Society, Nova Scotia Division
- Choices Nutrition Services
- Dietitians of Canada
- Heart and Stroke Foundation of Nova Scotia
- Mount Saint Vincent University
- Nova Scotia Home and School Association
- Nova Scotia Nutrition Council
- Nova Scotia Department of Education
- Nova Scotia Department of Health
- Public Health Services, Annapolis Valley Health
- Public Health Services, Capital Health
- Public Health Services, Colchester/East Hants, Cumberland and Pictou County health authorities
- Public Health Services, Guysborough/ Antigonish, Strait and Cape Breton health authorities
- Public Health Services, South Shore Health
- Sobeys Inc

Introduction

Nova Scotia's rates of diet-related chronic conditions, such as cancer, type 2 diabetes, cardiovascular disease and obesity, are among the highest in Canada. Similarly, provincial rates of diet-related risk factors, such as obesity, abnormal lipids and high blood pressure, are serious public health problems. Research has shown that improving nutrition and increasing physical activity can prevent these and many other chronic conditions.

Until now, however, there has been little strategic coordination or investment in nutrition initiatives in the province. Limited capacity, workforce and resources have been major barriers to achieving better population-wide health outcomes.

Healthy Eating Nova Scotia is presented as an important step in overcoming these barriers. The document provides a framework for strategic and comprehensive action on healthy eating, one of four areas of emphasis of the Nova Scotia Chronic Disease Prevention Strategy (2003). The healthy eating strategy thus stands alongside and complements provincial strategies to reduce tobacco use and increase physical activity: the Nova Scotia Tobacco Strategy (2001) and Active Kids, Healthy Kids (2002).

This document is intended for people who are involved in making or influencing decisions about policies, programs or services that influence the way Nova Scotians eat. It is intended for people in a wide variety of sectors, working at provincial, regional and community levels. The document provides an evidence-based, intersectoral and strategic approach to improving the health and well-being of Nova Scotians. Four priorities are identified: food security, breastfeeding, children and youth, and fruit and vegetable consumption. These priorities are believed to have the greatest potential for improving health in the province. A rationale, objectives, current status and next steps are provided for each of the four priority areas.

While many organizations in the province are already working for better nutrition, *Health Eating Nova Scotia* will support more focussed and intersectoral action on the four high-impact priorities. Decisions about what to eat are influenced by many sectors, including food producers, manufacturers, and retailers, the media, and the education, health care and social safety systems. They are influenced by decisions of policy makers at the local, regional, provincial and federal levels. *Healthy Eating Nova Scotia* seeks to promote collaboration among these sectors. It is the first provincial food and nutrition strategy developed by an active partnership of government and non-government organizations, private corporations and professional associations, in consultation with the broader community.

The document is not meant to be prescriptive in nature. Instead, it is meant to stimulate an initial allocation of resources, and the creation of partnerships and action plans to address food and nutrition priorities.

Why a Healthy Eating Strategy?

Nova Scotia needs a healthy eating strategy for many reasons. Good nutrition is essential for health and well-being, and making healthy choices is more difficult than it has ever been before. As a result, illness due to nutrition-related causes is costing the province vast and growing amounts of money. Current, more piecemeal efforts to improve nutrition have been insufficient.

Nutrition, health and well-being

Good nutrition is essential for the normal growth and development of infants and children. Throughout life, healthy eating enhances quality of life, increases resilience and resistance to infection and is essential for good physical and mental health.

Research has shown that poor nutrition also affects school outcomes. It can affect our children's behavior, school performance and overall cognitive development. A hungry child has difficulty learning. In the short term, even missing one meal can affect behaviour and ability to learn. On a continuous basis, poor nutrition can affect psychological factors such as motivation, attentiveness and emotional expression. Over time, poor nutrition also reduces a child's resistance to infection, leading to absenteeism, which further affects opportunities for learning.[1]

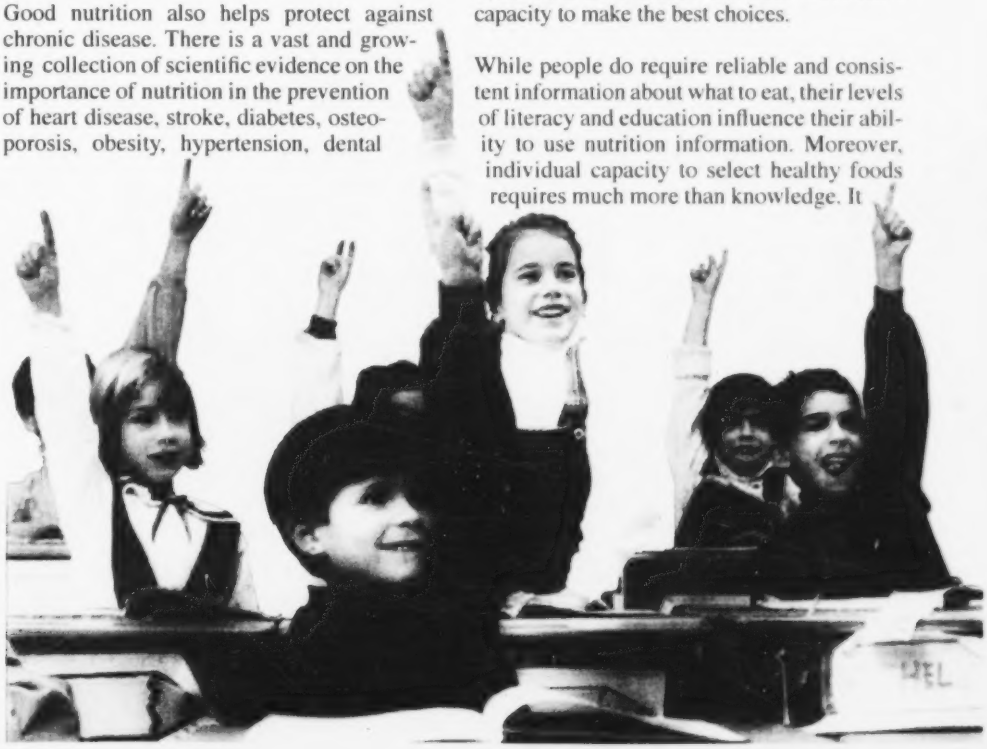
Even missing one meal can affect behaviour and ability to learn. On a continuous basis, poor nutrition can affect psychological factors such as motivation, attentiveness and emotional expression.

Good nutrition also helps protect against chronic disease. There is a vast and growing collection of scientific evidence on the importance of nutrition in the prevention of heart disease, stroke, diabetes, osteoporosis, obesity, hypertension, dental decay and certain types of cancers, particularly those of the gastrointestinal system.[2] Although the picture is still not complete and the evidence is sometimes contradictory, a thorough review of the literature provides ample evidence that unhealthy diets are a risk factor for many chronic diseases, that preventive interventions early in life offer lifelong benefits, and that improving diets in adults and older people will reduce risks for death and disability due to chronic disease.

Healthy eating is more than a personal choice

How well-nourished and healthy we are depends, to a large extent, on choices we make about what and how much we eat. However, food selections are not simply a matter of personal choice. A variety of forces in our social, economic and physical environments influence what foods are available and each individual's capacity to make the best choices.

While people do require reliable and consistent information about what to eat, their levels of literacy and education influence their ability to use nutrition information. Moreover, individual capacity to select healthy foods requires much more than knowledge. It



requires cooking skills, time for food preparation and sufficient income to buy nutritious foods. All of these are profoundly influenced by local economic conditions, which in turn affect employment and income, which has been identified as the single most importar determinant of health.

Real incomes for poor and middle-class people in Nova Scotia declined sharply during the 1990s, contributing to growing income inequality in the region.[3] Furthermore, the poorest of Nova Scotian families are the poorest in the country.[4] For this group, there are very few food "choices".

Our rapidly changing social environment also influences eating patterns:

- More meals are eaten outside the home: in restaurants, schools, workplaces and daycare centres. The selection of foods available in these settings is often limited.
- Restaurants are continually increasing serving sizes.
- Marketing of fast and less-healthy foods is becoming ever more intense as large corporations replace the smaller, locally owned companies that used to supply most of our foods.
- Our information society has increased access to information and misinformation about food and nutrition.
- People have become preoccupied with weight, body image and dieting.

Clearly, the factors that influence eating patterns are complex, and to have any significant impact, a provincial healthy eating strategy must look beyond individual factors to the broader social and economic forces. The growing rates of diet-related disease in the province provide compelling evidence of the need for this type of comprehensive approach.

Increasing illness associated with unhealthy eating

Chronic diseases contribute to illness, long-term disability and reduced quality of life. In Nova Scotia, three diet-related diseases: heart disease, stroke and diabetes, are alone responsible for nearly half of all deaths in the province. Our rates for diabetes and diseases of the circulatory system are the second highest in the country.[5]

These high rates of chronic disease are not surprising, given the very high rates of overweight and obesity in our province. A 2001 Statistics Canada study suggests that 39% of Nova Scotian adults are overweight (BMI> 27), compared to 18% in 1985,[6] and to 32% nationally (2001).[7] Obesity is now recognized by experts as the second-leading preventable cause of death after cigarette smoking. It is a prime factor in the development of heart disease, type 2 diabetes, hypertension, osteoarthritis, some kinds of cancer and a variety of other chronic conditions. According to Statistics Canada, obese Canadians are four times more likely to have type 2 diabetes, and 56% more likely to have heart disease, than those with healthy weights.[8]

Obesity, however, is only one possible effect of poor nutrition. Unhealthy eating in itself is also a risk factor for many chronic diseases, regardless of weight. Diets high in calories, cholesterol, fat and salt, and low in fibre have been linked to heart disease, cancer, stroke, type 2 diabetes and atherosclerosis, five of the ten leading causes of death.[9]

Chronic diseases are far more likely to affect people with low incomes, through a variety of mechanisms that are not yet clearly understood.[10] People living in poverty tend to die at a younger age and experience higher overall rates of illness. They are also far more likely to require health care services.[11] According to Statistics Canada studies in both 1994/95 and 1996/97, the rate of all chronic diseases studied was higher for people in the two lowest-income groups than for those in the three upper-income groups.[12]

Diet-related conditions are a growing public health concern around the world, because of the very high cost of treatment, which can continue for decades. Overall, diet-related disease has been estimated to cost the Canadian economy $6.3 billion a year.[13] In Nova Scotia, diseases of the circulatory system cost our health care system an estimated total of $389.4 million a year. The resulting loss of

Chronic diseases are far more likely to affect people with low incomes, through a variety of mechanisms that are not yet clearly understood.

productivity due to early death and disability costs the provincial economy an additional $571 million a year, for a total provincial economic burden of $961 million each year for heart disease, stroke and hypertension alone. Type 2 diabetes has been estimated to cost the province $73.5 million per year, and cancers (overall) have been estimated to cost another $581 million.[14]

These costs are expected to increase very rapidly in Nova Scotia as a result of two powerful forces: our rapidly aging population, and the soaring costs of treating chronic conditions with medication and high-tech equipment. Immediate, strategic and innovative action is called for to avoid a financial and health care crisis.

Globally, chronic diseases account for more than half of all deaths, and nearly half of the disease burden.

Nova Scotia is already home to many initiatives meant to improve nutrition and reduce chronic disease. A healthy eating strategy can enhance communication, coordination and collaboration among the various groups currently involved, resulting in a far greater impact. For example, a carefully designed nutrition message from health care professionals, supported by policies regarding foods available in schools, hospitals and other public institutions, and promoted through the mass media, could have a much greater impact than any of those sectors working alone, with sometimes inconsistent messages or practices. A coordinated strategy can also strengthen current initiatives by:

- creating a common vision
- providing a framework for new partnership development
- promoting use of best practices
- increasing efficiency through resource sharing
- increasing access to funding opportunities.

Our part in a global effort

Healthy Eating Nova Scotia is part of a coordinated, worldwide movement to reduce chronic disease through better nutrition. Globally, chronic diseases account for more than half of all deaths, and nearly half of the disease burden. In recognition that a very few, preventable risk factors account for most of the world's disease, the World Health Organization (WHO) launched the Global Strategy on Diet, Physical Activity and Health in 1999. The strategy, which calls on all countries to participate in developing, implementing and evaluating strategies that promote health through healthy eating and physical activity, was officially endorsed by the World Health Assembly in May 2004.

In Canada, federal, provincial and territorial governments began working on an Integrated Pan-Canadian Healthy Living Strategy in 2002. This strategy, still a work in progress, is meant to provide a conceptual framework for coordinated action to be sustained over time and at every level. The initial areas of emphasis are healthy eating and physical activity, and their relationship to healthy weights.

At the provincial level, *Healthy Eating Nova Scotia* is one piece of the overall Nova Scotia Chronic Disease Prevention Strategy (2003). The strategy has two broad goals: reduced health disparities and improved health outcomes. Four areas of emphasis are identified for achieving these goals: healthy eating, physical activity, tobacco and mental health. The document calls for the adoption of a provincial healthy eating strategy.

As part of this worldwide effort, *Healthy Eating Nova Scotia*, together with the provincial tobacco and physical activity strategies, will provide a blueprint for health promotion and the prevention of chronic diseases in Nova Scotia.

Working Together for Healthy Eating

Healthy Eating Nova Scotia reflects a population health approach, and is guided by the same principles and strategic directions as the Nova Scotia Chronic Disease Prevention Strategy.

A population health approach is designed to maintain and improve the health of the entire population and to reduce health inequities among population groups. Population health concerns itself with the physical and social environments that affect people's health, and the conditions that enable and support people in making healthy choices. A population health approach addresses the entire range of factors that determine the health of the population. Because many of these factors, such as income, education and employment, are beyond the control of the health sector, improving population health requires collaborative efforts across sectors. It also requires using multiple strategies and maintaining efforts over the long term.

Guiding Principles

Healthy Eating Nova Scotia has four guiding principles:

Integration Action to promote healthy eating must be coordinated across sectors and fully integrated with the Nova Scotia Chronic Disease Prevention Strategy; Active Kids, Healthy Kids; the Nova Scotia Tobacco Strategy, and other provincial, regional and national plans to improve health.

Partnership and shared responsibility *Healthy Eating Nova Scotia* requires the combined efforts of many sectors, including health, environment, education, recreation, agriculture and others, at every level, in the voluntary, government and private sectors.

Best/promising practices Action to promote healthy eating must be based on evidence obtained from scientific research, community experience and cultural knowledge.

Capacity To ensure that efforts are sustainable over the long term, the healthy eating strategy must develop skills, resources and organizational structures, while building on existing strengths.

Our vision

It is the year 2010. Nova Scotia is recognized across the country as a province with public policies and social environments that support healthy eating for all citizens.

- All Nova Scotians have access to safe, affordable, locally grown, nutritionally adequate and culturally acceptable foods.
- Breastfeeding has become the cultural norm.
- People of all ages and abilities enjoy healthy eating and active lifestyles, and this is reflected in our media, our schools and child care programs, and our workplaces.
- Organizations from many sectors, including food, health, education, agriculture and community, work together to ensure that policies, programs and resources are in place to support these cultural changes.

As a result, latest health statistics are showing that Nova Scotians are healthier than ever before.

Strategic Directions

The five strategic directions of the Nova Scotia Chronic Disease Prevention Strategy will provide a framework for implementing *Healthy Eating Nova Scotia*:

Leadership Provide the governance, administrative, financial and human resources necessary to effectively sustain action on healthy eating.

Community development and infrastructure Ensure an appropriate service system infrastructure and community capacity to plan, deliver and sustain interventions that support healthy eating.

Public policy Establish public policy frameworks that support healthy eating and chronic disease prevention.

Knowledge development and translation Ensure appropriate access to research and other types of evidence for informing policies, programs and practices that support healthy eating.

Health communications Develop and implement communication strategies that support healthy eating.

Priorities for action

Four action areas have been identified as priorities for achieving this vision: breastfeeding, children and youth, fruit and vegetable consumption, and food security. These priority action areas were identified as nutritional "best buys" – those changes that would have the biggest impact on the health of Nova Scotians. They were selected after a thorough review of the research literature, including research on obesity and chronic disease prevention, information about the health of Nova Scotians and the foods we eat, and research on best practices. The following pages include outcome objectives and a brief rationale summarizing the evidence base in each priority area. Each section also lists proposed next steps and partners for achieving the objectives. In keeping with the population health approach, these lists include multiple strategies and sectors.

Breastfeeding

Objectives

1. To increase initiation and duration of breastfeeding.
2. To increase the number of health care organizations that have adopted the Ten Steps to Successful Breastfeeding.
3. To increase the number of public and community health agencies that have adopted the Seven Point Plan for Protection, Promotion and Support of Breastfeeding.

What do we know about breastfeeding?

The many benefits of breastfeeding, for both mother and child, are well known. Health Canada and other experts recommend that healthy infants receive *only* breast milk until six months of age. Ideally, breastfeeding should continue for up to two years and beyond, with the addition of nutrient-rich solid foods at six months.[15] Yet in Nova Scotia, nearly one-third of children are never breastfed, and most of those who do receive mother's milk do so for only a few weeks.

The first six months of a baby's life is a time of very rapid growth and development. Breast milk provides all the ingredients for optimal physical and cognitive development[16], and also provides life-long protection from preventable illness. For the child, breastfeeding has been shown to reduce the incidence of ear infections, childhood asthma,[17] gastrointestinal disease and eczema,[18] sudden infant death syndrome and a variety of childhood infectious diseases. It also provides protection for premature infants against life-threatening illnesses.[19] For the mother, breastfeeding has been shown to reduce the risk of breast and ovarian cancers.[20]

More recently, research is showing that breastfeeding plays an important role in preventing obesity and the many related chronic diseases later in life. The Joint Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) Expert Consultation Group on Diet, Nutrition and the Prevention of Chronic Diseases (2003) reviewed the latest research and found increasing evidence that a lower risk of developing obesity is directly related to the length of exclusive breastfeeding (that is, feeding with breast milk only).

The Reproductive Care Program of Nova Scotia estimated the percentage of breastfeeding mothers[21] to be 67% in both 2001 and 2002. The Canadian Community Health Survey (2001) estimated that 78% of Nova Scotian women either breastfeed or try to breastfeed. While these rates are encouraging, roughly one-third (34.6%) of these mothers breastfeed for three months or less, far from the six months or more that is recommended as optimal.

Lowest levels of breastfeeding are found among younger mothers, single mothers and mothers with lower levels of education and income. For example, in Nova Scotia, the rate of breastfeeding among mothers from highest income neighbourhoods is 17% higher than among those from lowest income neighbourhoods.[22] Strategies to increase breastfeeding rates in these more vulnerable populations are a priority.

Breast milk provides all the ingredients for optimal physical and cognitive development, and also provides life-long protection from preventable illness.

Facilitation and Support of Breastfeeding

A mother's ability to breastfeed her infant depends on the support she receives from those around her. In Aboriginal communities for example, the mother's partner and the mother's mother are the two most influential figures in decisions about breastfeeding. For mothers of every culture, the aim is to make breastfeeding as easy as possible, rather than discouraging her from breastfeeding, either intentionally or unintentionally. Families, employers, businesses, local governments, and health and child care facilities must all be involved in creating supportive environments.

To date, increasing support for breastfeeding in hospitals has received the most attention. In 1992, the World Health Organization (WHO) and UNICEF jointly launched the Baby-Friendly Hospital Initiative (BFHI). The BFHI directs hospitals to meet the Ten Steps to Successful Breastfeeding. These ten steps have been widely studied and acclaimed as best practices for promoting breastfeeding.[23] More recently, Canada has adopted a Seven Point Plan for the Protection, Promotion and Support of Breastfeeding in Community Health Services in Canada, which is generally known as the Baby-friendly Initiative or BFI.[24]

A mother's ability to breastfeed her infant depends on the support she receives from those around her.

However, experts now recognize that support for breastfeeding must go beyond health care settings. One-on-one support from another mother is considered by many to be the most effective way to increase the duration of breastfeeding. This approach has shown greater success than education programs, written information and support from health professionals.[25] Communities also have a role to play in increasing the duration of breastfeeding, and workplaces and child care facilities are encouraged to adopt policies that support nursing mothers.

Currently available indicators:

- rates of breastfeeding initiation (the Canadian Community Health Survey)
- rates of breastfeeding at hospital discharge (Atlee Perinatal Database)
- duration of breastfeeding (the Canadian Community Health Survey)
- number of hospitals and community health services working towards and adopting policies consistent with the BFI.

What's happening now?

A Provincial Breastfeeding and BFI Committee has been active in Nova Scotia since 1999. The committee was established by the Department of Health to provide leadership for the protection, promotion and support of breastfeeding and to support the implementation of the Baby-Friendly Initiative within Nova Scotia. The provincial committee works closely with the Breastfeeding Committee of Canada. Current objectives include adopting a provincial breastfeeding policy, supporting health system organizations in implementing BFI policies, identifying breastfeeding information and education standards for health professionals, and implementing a provincial breastfeeding social marketing strategy.

There are several other initiatives that promote breastfeeding province-wide:

- Breastfeeding education is an important component of prenatal programs offered at no cost by Public Health Services province-wide. Shortly after delivery, public health nurses offer support for breastfeeding through telephone and home visits.
- The Healthy Beginnings Enhanced Home Visiting Program is a new province-wide home visiting program coordinated by Public Health Services, for new mothers who most need extra support. Increased duration of breastfeeding is an expected outcome of this program.
- The Canada Prenatal Nutrition Program (CPNP) is a comprehensive federally-funded program with 8 "projects" in Nova Scotia, serving priority women through sites in:
  - Cape Breton Island
  - Antigonish Guysborough and Pictou Counties
  - Cumberland County
  - Digby County
  - Hants and Kings Counties
  - East Preston
  - Spryfield

The eighth project is province-wide, and serves off-reserve Aboriginal women. Promoting and supporting breastfeeding are priorities at all sites.

Support for breastfeeding is offered in various ways through family resource centres around the province, often in collaboration with local Public Health Services staff. Some examples of local initiatives to promote breastfeeding are listed below:

- The Friendly Feeding Line in Yarmouth County pairs pregnant women who plan to breastfeed with volunteer mothers, who provide support through regular phone calls.
- The Lunenburg/Queens Counties Breastfeeding Working Group is planning a peer support program for mothers who breastfeed.
- The IWK offers a weekly breastfeeding support clinic for mothers in the Spryfield area of Halifax Regional Municipality.
- A breastfeeding support group, made up of Aboriginal mothers and elders who have breastfed, is under development in Eskasoni.

Next Steps

- Establish a provincial system to monitor breastfeeding initiation and duration.
- Adopt or confirm the provincial breastfeeding policy (currently in draft) and establish a process to ensure that it is implemented in all organizations funded through the provincial health system.
- Review public policies relating to income and employment, and advocate for changes that are more supportive of breastfeeding.
- Work with employers to identify supports required to implement baby-friendly workplace policies.
- Work with the Nova Scotia Human Rights Commission to promote the adoption of breastfeeding-friendly policies in workplaces and public areas.
- Work with communities in developing breastfeeding peer support programs.
- Enhance the breastfeeding content of academic and continuing education programs for health care workers and early childhood educators.
- Enhance the capacity of staff in early childhood programs to support breastfeeding families.
- Consult families from different cultural communities, to determine their information and support needs related to breastfeeding.

Potential partners

Achieving the objectives for the breastfeeding priority will require working with a variety of partners, in addition to those currently involved in the Healthy Eating Action Group. Some of these are identified below.

The Provincial Breastfeeding and BFI Committee includes a variety of health sector organizations, including all levels of government, district health authorities, professional associations and academic institutions. Also involved are UNICEF, the Mi'kmaq Native Friendship Centre (HRM) and the Nova Scotia Advisory Council on the Status of Women.

Broadening support for breastfeeding into Nova Scotia workplaces will require working with organizations connected to employment and workplace health and safety, such as:

- Department of Labour
- Human Resource and Social Development Canada.
- Public Service Commission

In the same way, increasing support for breastfeeding in organizations that support young families will require working with family resource centres, child care service providers, the Department of Community Services and umbrella organizations such as:

- Certification Council of Early Childhood Educators of Nova Scotia
- Child Care Connections - Nova Scotia
- La Leche League Canada.
- Nova Scotia Childcare Association

Children and Youth

Environments that provide opportunities to learn to like high fat, energy dense foods and few opportunities to learn to like complex carbohydrates and fruit and vegetables, encourage obesity.

Objectives

1. To improve eating patterns of children and youth, based on Canada's Food Guide to Healthy Eating.
2. To increase the availability and affordability of healthy foods in child care, school and other child and youth settings.
3. To increase knowledge about food and nutrition among parents, teachers and caregivers.
4. To increase skills for encouraging the development of healthy eating practices in the early years, among parents and other caregivers of young children.

What do we know about healthy eating among children and youth?

Eating habits are developed early in life. Some evidence suggests that food habits established before age five are maintained throughout adulthood.[26] Environments that provide many opportunities to learn to like high fat, energy dense foods and few opportunities to learn to like complex carbohydrates and fruit and vegetables, encourage obesity.[27]

Parents have always played an important role in the development of children's preferences for healthy foods. Feeding practices affect the development of children's ability to regulate how much food they eat, a key factor in the prevention of obesity. Other factors in the family environment that appear to be important include parents' food preferences, knowledge and beliefs, children's food exposure, role modeling, media exposure and child-parent interactions around food.[28]

Poverty, however, profoundly limits the ability of parents to help their children develop sound eating habits, by restricting the quality and quantity of food they are able to buy. Recent evidence suggests that income-related food insecurity is growing among Nova Scotia children. The latest Child Poverty Report Card (2004) indicates that child poverty in our province grew by more than 12% between 1989 and 2002. Currently, close to 20% of children live in poverty. Child poverty is particularly severe among new immigrants, visible minorities, Aboriginal families and single parent families in our province.[29]

In addition to a child's experience at home, eating habits are influenced more than ever before by their experience in child care programs. Approximately 70% of Nova Scotia pre-school children have mothers in the workforce, and most of these children do much of their eating – and learning about eating – outside the home. Only 20% of children are in licensed programs, with the remaining 80% in unlicensed or informal child-care arrangements.[30] Child care providers, both formal and informal, therefore play a critical role in the development of eating habits.

Schools are a third important setting that influences the foods eaten by young people. Food services, vending machines and common school practices such as chocolate bar sales, use of fast-food vouchers as rewards and sponsorship by the fast-food industry, promote the consumption of foods high in fat, sugar and salt. Many of these practices are directly related to fund raising.

Children's food-related behaviours are also influenced by media messages. Research has shown that television advertising can affect children's knowledge and choices of particular food products, as well as influence decisions about what foods to buy, among both children and their parents.[31]

Unfortunately, we have little information about eating practices and nutritional status of young people in Nova Scotia. However, we do know that more young people are getting type 2 diabetes, a situation that was virtually unheard of ten years ago when the disorder was known as adult onset diabetes. Currently, among children under age 19 who are diagnosed with diabetes, 16-18% are of type 2.[32]

Increasing childhood obesity is another serious indicator of unhealthy eating. Childhood obesity affects both physical and psycho-social health, and has considerable economic costs. A recent study of Nova Scotia children in grades 3, 7 and 11 found that up to 37% of boys and up to 45% of girls were either overweight or at risk of becoming so.[33] A national study of children aged 7-13 found that obesity has grown from 5% in 1981 for both boys and girls to 14% in boys and 12% in girls in 1996.[34]

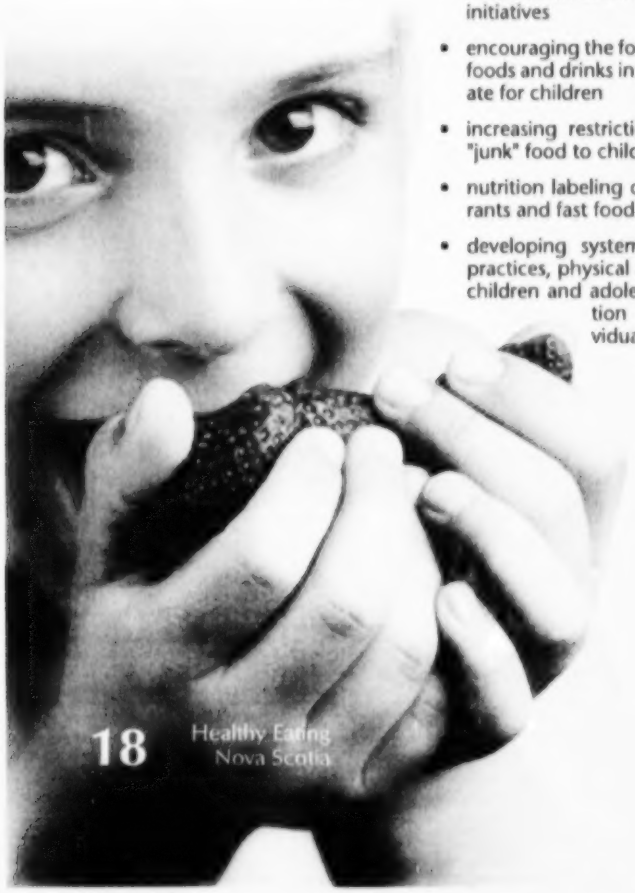
Poor nutrition, however, is only one side of the body weight equation. Physical inactivity is also an issue for Nova Scotia children. Research by Campagna et al. (2002) found that throughout the province, physical activity decreases dramatically and progressively during adolescence, among both boys and girls. At the population level, achieving healthy weights requires action to increase both healthy eating and physical activity.

What can be done to improve young people's eating practices?

A recent national environmental scan of activity pertaining to healthy eating in young children found a large amount of excellent resource material on the topic. Clearly, information is not lacking. What appears to be needed is a means of supporting families and caregivers in getting and using the information.[35] The Family Child Care Training Program, developed by the Canadian Child Care Federation, was identified as a best practice model for reaching formal and informal child care providers. Healthy eating is one of several topics covered in this comprehensive program, which can be delivered through classroom, small group, one-to-one and distance education.[36]

Research found that throughout the province, physical activity decreases dramatically and progressively during adolescence, for both boys and girls.

In the school system, comprehensive school health programs have been effective in improving eating practices, increasing physical activity and possibly reducing obesity.



In the school system, comprehensive school health programs have been effective in improving eating practices, increasing physical activity and possibly reducing obesity.[37] The comprehensive school health approach extends beyond health and physical education to include school policy, the physical and social environment at school, and the links between schools, families and communities. The World Health Organization's Health Promoting Schools framework is one example that applies the principles of the Ottawa Charter for Health Promotion to the school setting, developing a coordinated, whole school approach.

Many policy options have been recommended for addressing the issue of obesity in a more comprehensive way.[38] For example:

- using revenues from the GST on soft drinks and snack foods to subsidize the cost of low-energy, nutritious food and to fund nutrition-related health promotion initiatives
- encouraging the food industry to produce foods and drinks in portion sizes appropriate for children
- increasing restrictions on advertising of "junk" food to children
- nutrition labeling of foods sold in restaurants and fast food outlets
- developing systems to monitor eating practices, physical activity and weights of children and adolescents (at the population rather than the individual level).

Currently available indicators:

- incidence of children and youth classified as overweight and at risk of overweight (National Longitudinal Survey of Children and Youth.)
- proportion of children who meet the recommendations of Canada's Food Guide to Healthy Eating (although this has not been measured to date, it will be the focus of the Canadian Community Health Survey, Cycle 2.2, which will provide a basis for future ongoing monitoring.)

What's happening now?

There is currently a great deal of action to promote healthy eating among young people at both the provincial and district levels.

The development of healthy eating habits among young children is a topic addressed by virtually all family resource centres and public health offices in Nova Scotia, to a greater or lesser extent. Some family resource centres offer programs on child nutrition, in collaboration with public health nutritionists. In other centres, information is provided more informally, by example and on demand. Public health nutritionists around the province provide information to parents, child care centres and schools through a variety of formal and informal programs. This support varies from one district to another and is seriously limited by available resources.

Nutrition and feeding of young children is also one of the topics to be covered in the new, province-wide, Healthy Beginnings Enhanced Home Visiting Program. This program is intended to provide intensive, in-home support for the mothers of children age 0-3 who most need it.

The Department of Community Services requires that child care centres have their menu approved by a nutritionist when first licensed and subsequently only on request. In most areas of the province, child care workshops are offered annually, covering a variety of licensing issues including nutrition and food safety.

Local initiatives to support healthy eating in young children include:

- Workshops offered by the Cumberland Early Childhood Development Support Centre of the Nova Scotia Community College, to promote awareness of the role of early childhood education in developing healthy eating habits.
- An annual workshop for daycare staff on nutrition and feeding of young children offered by Public Health Services in Cape Breton Island and Guysborough and Antigonish counties.

For older children, an intersectoral partnership led by the Department of Education has been developing a provincial policy framework to address healthy eating at school. A draft policy will be available for consultation by spring 2005, with implementation scheduled to begin the following September. From a research perspective, an upcoming component of the provincial Physically Active Children and Youth (PACY) research will collect information about eating practices of young people throughout the province.

Schools in several areas have taken steps to improve nutrition and increase physical activity. For example:

- The Healthy Foods for Schools Project advocates for the development of healthy food policies in school boards in Cape Breton and Victoria Counties.
- The Annapolis Valley Health Promoting Schools Project takes a comprehensive approach to promoting healthy eating and physical activity in 12 Annapolis Valley schools. The positive impacts of this project on diet, physical activity and body weight have been published in the American Journal of Public Health.[39]
- The Cumberland County School Food Project, a partnership of the agriculture, education, health and economic development sectors, addresses healthy eating by working with parents, students and local community organizations.
- The Chignecto-Central Regional School Board has adopted a school food policy, developed in partnership with students, parents, teachers, local food producers and Public Health Services.
- Numerous schools throughout the Province have implemented breakfast and lunch programs. These programs are being implemented in a variety of ways usually in partnerships with other community and funding agencies.
- Elementary schools in Halifax Regional Municipality have access to two complementary programs. The Healthy Eating at School Grant Program offers one-time grants up to $5000 to help schools provide healthier food choices, and Our Healthy School supports school efforts to become "health promoting schools".

While there appears to be much happening around the province on this issue, initiatives are often local, sporadic and characterized by insufficient resources. There is an urgent need for the development of a province-wide, coordinated and adequately resourced approach to addressing nutrition issues of young people at home, in child care settings and in schools throughout the province.

While there appears to be much happening around the province to promote healthy eating among young people, initiatives are often local, sporadic and characterized by insufficient resources.

Next Steps

- Enhance the early childhood feeding content of academic and continuing education programs for teachers, health care workers and early childhood educators.
- Enhance the capacity of staff in early childhood programs to support parents in helping their children develop healthy eating habits.
- Consult families to determine their information and support needs related to early childhood nutrition.
- Provide additional training and resources to licensed child care centres, to increase their ability to implement nutrition-related provincial regulations.
- Develop opportunities for unlicensed and informal child care providers to increase knowledge and skills relating to early childhood feeding.
- Work with schools and school boards to support the development of comprehensive school health programs.
- Provide additional resources to schools, to increase their ability to offer low-cost, healthy food choices.
- Advocate for policy changes that promote healthy eating among young people.

Potential partners

Achieving the objectives for the children and youth priority area will require working with a variety of partners, in addition to those currently involved in the Healthy Eating Action Group and other health and nutrition-related organizations.

Currently, an intersectoral partnership looking at food and nutrition in the school system includes the Department of Education, representatives from each of the eight school board areas, the Office of Health Promotion, the Department of Agriculture and Fisheries, the Nova Scotia School Boards' Association, the Nova Scotia Teachers Union, the Nova Scotia Federation of Home and School Associations and La Fédération des parents acadiens de la Nouvelle Écosse (FPANE). While this is an important start, achieving the strategy's objectives will require that partnerships also include institutional and commercial food service providers. Such a partnership should be supported and maintained.

Improving feeding practices in child care settings will require closer collaboration with that sector as well as the food and agriculture sector. The following organizations are offered as examples:

- Aboriginal Headstart
- Certification Council of Early Childhood Educators of Nova Scotia
- Child Care Connections - Nova Scotia
- Mi'kmaq Family and Children's Services
- Nova Scotia Childcare Association
- Nova Scotia Community College
- Nova Scotia Council for the Family
- Nova Scotia Department of Community Services

At the local level, family resource centres and home and school associations will be key partners for increasing knowledge and skills among parents.

Fruit and Vegetable Consumption

Objectives

1. To increase consumption of fruit and vegetables among all Nova Scotians.
2. To increase the availability of fruit and vegetables in community, work, school and health care settings.
3. To improve access to and affordability of fruit and vegetables for low income populations.

What do we know about fruit and vegetable consumption?

Our mothers and grandmothers told us to eat our fruit and vegetables. Now research shows us just how wise they were. A rapidly growing number of studies is showing the protective role that these foods play in preventing chronic diseases, including heart disease, stroke, type 2 diabetes, hypertension and many cancers, particularly those of the gastrointestinal system. Expert reviews of this research have led to the promotion of increased fruit and vegetable consumption in chronic disease prevention strategies worldwide.[40]

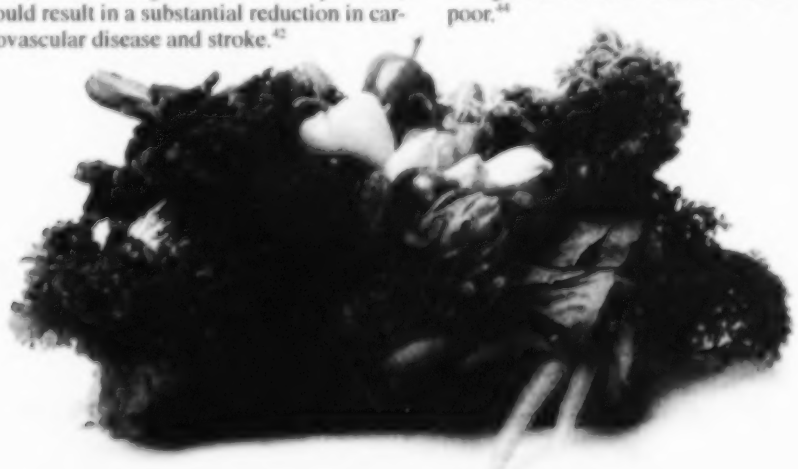
One study, which brought together the world's leading scientists in diet and cancer, concluded that eating five servings or more of a variety of vegetables and fruit could, by itself, decrease overall cancer incidence by at least 20%.[41] Another international review concluded that increasing fruit and vegetables (not including tubers such as potatoes) would result in a substantial reduction in cardiovascular disease and stroke.[42]

According to the latest Statistics Canada figures, less than one-third (29%) of Nova Scotians over age 12 eat the recommended 5-10 servings of fruit and vegetables every day. This compares to 35% nationally. Men are more likely than women to eat less than the recommended amounts. These rates do not differ significantly across health districts. People who experience food insecurity are less likely to eat the recommended number of servings.[43]

Focus groups held across Canada as part of the national 5 to 10 a Day Campaign found that most people believe they need only 3 to 5 servings of vegetables and fruit each day, and do not know that these foods help prevent cancer and heart disease. A public opinion poll conducted by the same group found that the largest obstacle to healthy eating is lack of time.

Another considerable obstacle is cost. A study conducted locally demonstrated that the cost of eating the 5-10 recommended daily servings is beyond the reach of Nova Scotians living on income assistance and the working poor.[44]

One study concluded that eating five servings or more of a variety of vegetables and fruit could, by itself, decrease overall cancer incidence by at least 20%.



Children at the Mount Saint Vincent University Child Study Centre Daycare plant a vegetable garden every spring, and later harvest and eat the vegetables.

What works to increase consumption of fruit and vegetables?

A systematic review of research on increasing fruit and vegetable consumption in people from age four to adulthood found that the most effective programs:

- give clear messages about increasing fruit and vegetable consumption
- incorporate behavioural theories and goals, providing a consistent framework for implementation and evaluation
- provide longer, more intensive interventions rather than one or two contacts
- actively involve influential people such as family members
- have a greater impact on those whose knowledge or intake are lower.[45]

Clearly, public education can be an effective means of increasing consumption of fruit and vegetables. At the same time however, achieving objectives in this area will require increasing the ability of families to afford these foods, and increasing their availability in public eating places.

Currently available indicators:

- percent of Nova Scotians who eat five or more servings per day (the Canadian Community Health Survey)

What's happening now?

As one of the four food groups in Canada's Food Guide to Healthy Eating, the importance of fruit and vegetables is included in most nutrition-related initiatives. However, there are only a few, very local, initiatives focussing specifically on these foods in Nova Scotia. For example:

- South Shore Health promotes awareness of fruit and vegetables as part of a workplace wellness initiative in hospitals in Lunenburg and Queens counties.
- Children at the Mount Saint Vincent University Child Study Centre Daycare plant a vegetable garden every spring, and later harvest and eat the vegetables.
- Farms in a few areas offer community supported agriculture programs that deliver local, organically grown food directly to clients' homes.

Nationally, the Canadian Cancer Society, the Heart and Stroke Foundation and the Canadian Produce Marketing Association have joined forces in the 5 to 10 a Day Campaign, an effort to reduce the risk of cancer and cardiovascular disease by encouraging people to consume at least five servings of vegetables and fruit a day. The aim of the campaign is to create awareness and change eating habits through a mass media campaign, supermarket signs and education materials for professionals and the general public.

Next Steps

- Advocate for policy changes that make fruit and vegetables more accessible to people on low incomes.
- Ensure that any nutrition guidelines produced for government funded or regulated food service operations include efforts to increase access to fruit and vegetables.
- Support the development of community-based initiatives that increase knowledge and skills related to preparing fruit and vegetables.
- Encourage all member organizations in the Nova Scotia Alliance for Healthy Eating and Physical Activity to complement the national 5 to 10 a Day Campaign with activities at the local level.
- Encourage Alliance member organizations to adopt policies regarding the nutritional quality of foods they serve at meetings.

Potential partners

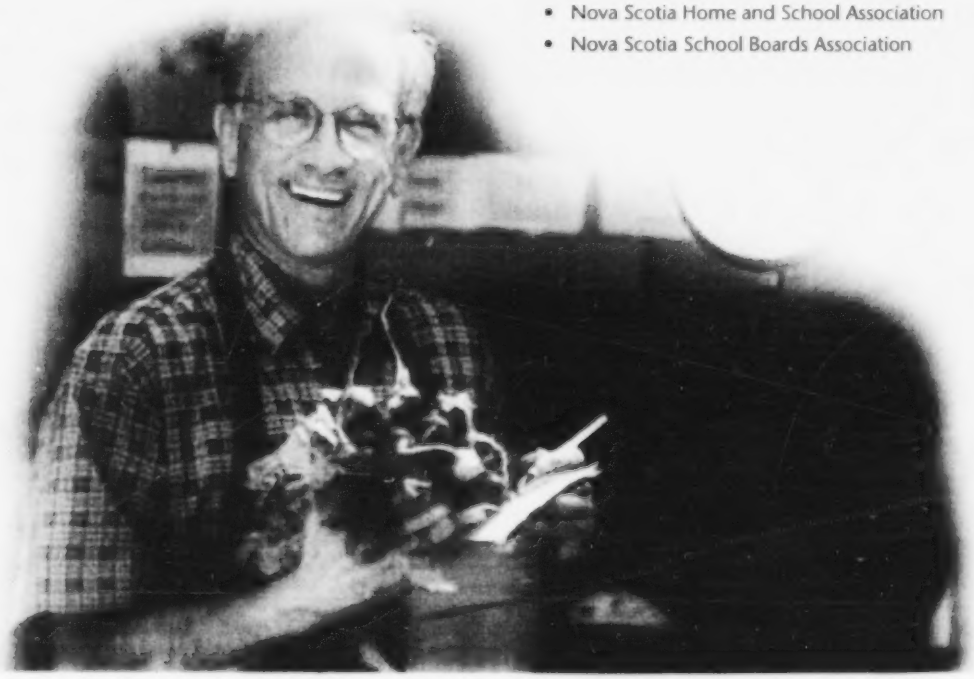
Increasing fruit and vegetable consumption in the province will require working with a variety of partners, in addition to those currently involved in the Healthy Eating Action Group. Some of these are identified below.

Potential partners from the food production sector include:

- Agriculture and Agri-Food Canada
- Atlantic Canada Organic Regional Network (ACORN)
- Greenhouse Growers Association of Nova Scotia
- Nova Scotia Department of Agriculture and Fisheries
- Nova Scotia Federation of Agriculture
- Nova Scotia Fruit Growers Association
- Nova Scotia Organic Growers Association

Potential partners representing child care and education sectors:

- Child Care Connections - Nova Scotia
- Nova Scotia Childcare Association
- Nova Scotia Community College
- Nova Scotia Department of Community Services
- Nova Scotia Department of Education
- Nova Scotia Home and School Association
- Nova Scotia School Boards Association



Food Security

Objectives

1. To increase the proportion of Nova Scotians who have access to nutritious foods.

2. To increase the availability of nutritious, locally produced foods throughout the province.

Food security means being able to get enough healthy food and not having to worry about where your next meal will come from.

What do we know about food security?

Food security has been defined as the ability of all people, at all times, to have access to nutritious, safe, personally acceptable and culturally appropriate foods, produced (and distributed) in ways that are environmentally sound and socially just.[46] The concept has many dimensions. It means being able to get enough healthy food and not having to worry about where your next meal will come from. It means that people involved in growing and handling food are able to make a decent living. It also means growing and producing food in ways that protect the resources so that there will be healthy food for our children's children.[47]

At the individual level, food security is about access to food, which implies that food is available close to home, and that people can afford to buy it. Income, widely recognized as the single most important determinant of health, plays a major role in food security. Recessions and reduced social spending by governments during the 1980s and 1990s have resulted in increased levels of poverty, income inequality and food insecurity across the country.[48] According to latest figures from the National Council of Welfare, close to 144,000 Nova Scotians live in poverty. This figure represents 15.8% of all Nova Scotians. The rate of poverty among families led by single mothers is particularly alarming, at 48.8%.

Rates of poverty are consistently higher among immigrant, Aboriginal and visible minority populations. For example, approximately 20% of Nova Scotia children live in poverty, compared to 50% for children of new immigrants, 42% for visible minority children, and 38% for Aboriginal children. For children with disabilities, the latest poverty rate has been estimated at 32%.[49]

Research tells us that people who live in poverty cannot afford to eat well, no matter how carefully they choose and prepare food. A recent study of the cost of basic foods around the province showed that Nova Scotians working for minimum wage or on income assistance are unable to afford a basic, healthy food basket that meets their family's nutritional needs. The cost of a basic diet would be a struggle even for families earning $9.95 per hour, the average call centre wage at the time of the study. The study concluded that wages and income support programs in the province are too low.[50]

As a result, food bank use is growing in this province. Close to 24,000 Nova Scotians used food banks in 2003, up 17% over the previous year.[51] However, results of the National Longitudinal Survey of Children and Youth have shown that only two-thirds of those who experience hunger seek support from food banks. For this reason, food bank use alone is a poor indicator of the prevalence of food insecurity.[52]

More reliable indicators of food insecurity are provided by the Canadian Community Health Survey. The survey suggests that 17% of Nova Scotian households (over 133,500 people) experienced food insecurity at some time in 2000/01. Nearly 8% of households reported that someone in their household did not have enough to eat at least once that year, and nearly twice that many said they did not get the quality or variety of food they should have, due to lack of money. More than 11% worried that they would not have enough to eat.[53]

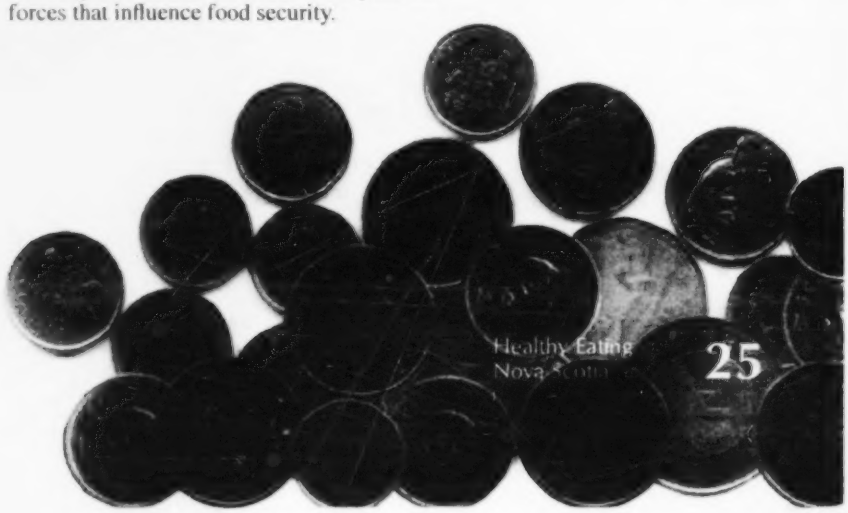
Numerous studies have shown that families headed by single mothers are far more likely to report that their children are hungry. One recent study of 141 low-income single mothers in Atlantic Canada found that virtually all of them regularly experience food insecurity.[54]

In addition to income, issues such as transportation and trends in the food industry also affect access to food. These can be particularly challenging for families in rural Nova Scotia. Rural families have fewer choices about where to shop. Supermarkets and farm markets, where food tends to be less expensive, can be very far from home. The most recent food costing study showed that the cost of a basic, nutritious food basket is considerably higher in smaller grocery stores and in rural Nova Scotia. The study concluded that food needs to be made more accessible in rural areas, through the development of local food systems and alternative transportation strategies.[55]

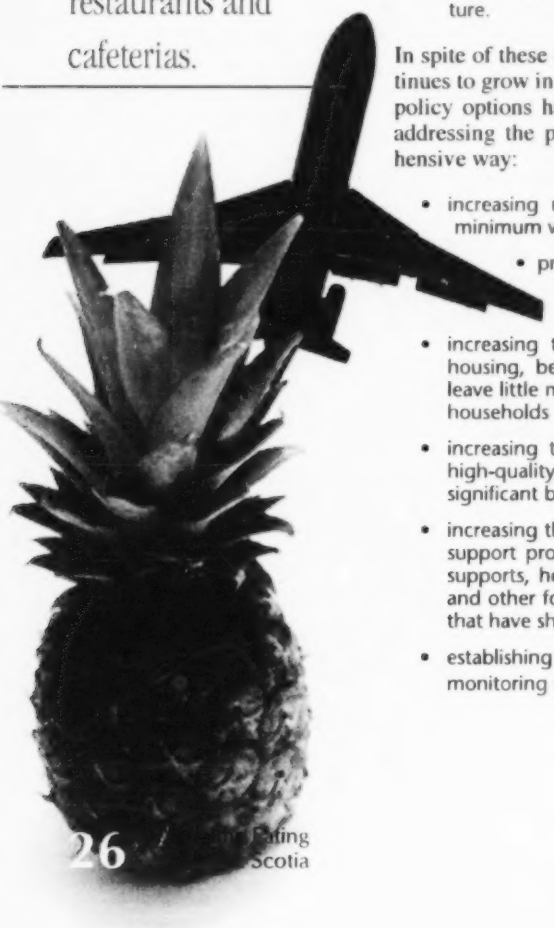
On a broader societal level, food security requires that sufficient, safe and nutritious foods continue to be available for all Nova Scotians in the future. This involves changes to agricultural practices and food distribution systems. Food producers must be able to make a living farming or fishing in sustainable ways that protect the province's farmland, water supply, fishery and other resources for future generations.

Food security is therefore an environmental issue as well as a social justice issue. Moreover, it is a chronic disease prevention issue. Unless people have access to healthy food, strategies aimed at encouraging them to eat more fruit and vegetables, breastfeed their infants and help their children develop healthy food habits can have only a very limited impact. Until recently, most efforts to promote healthier eating in Nova Scotia have focussed on influencing individual choice, without considering whether people have access to foods of sufficient quality and quantity. Research in other locations has shown that this kind of intervention can actually have a negative impact. Because campaigns focusing on personal choice are less effective with lower income populations, who have fewer options to choose from, they tend to effectively increase the health gap between the rich and poor.[56] Research consistently demonstrates that poverty is associated with poorer nutrition and higher rates of obesity. Reducing health disparity of this type is one of two overall goals of Nova Scotia's Chronic Disease Prevention Strategy. Achieving this goal will require addressing the social, economic and political forces that influence food security.

Because campaigns focusing on personal choice are less effective with lower income populations, who have fewer options to choose from, they tend to effectively increase the health gap between the rich and poor.



With increasing globalization, locally grown foods have become a rare commodity in supermarkets, restaurants and cafeterias.



What can be done to increase food security?

In general, action to address food insecurity in Canada has consisted of a patch-work of community-led efforts, using one of three broad approaches:[57]

- programs that provide free or subsidized food, such as food banks, soup kitchens and breakfast programs
- health promotion / community development programs that focus on enhancing food buying and cooking skills, for example through group education programs and community kitchens
- approaches that move food directly from growers to consumers, such as farmers' markets, community gardens, good food boxes and community supported agriculture.

In spite of these efforts, food insecurity continues to grow in Canada. As a result, several policy options have been recommended for addressing the problem in a more comprehensive way:

- increasing real incomes, whether from minimum wage or income assistance
- protecting the affordability of healthy foods, particularly staples such as milk
- increasing the availability of affordable housing, because current housing costs leave little money for food in the poorest households
- increasing the availability of affordable, high-quality daycare, which is currently a significant barrier to employment
- increasing the availability of employment support programs, such as work related supports, health and recreation services, and other forms of transitional assistance that have shown promise
- establishing a hunger and food insecurity monitoring system.[58]

For increasing food security at the broader societal level, one essential change is reducing our reliance on imported foods. With increasing globalization, locally grown foods have become a rare commodity in supermarkets, restaurants and cafeterias. Increasing the availability of locally grown foods in all of these areas can occur through policies favouring local foods, and through partnerships with the agricultural and food service sectors. Farmers' markets and community supported agriculture, where food moves directly from farm to table, are two approaches that have been shown to increase food security at this level.[59]

Currently available indicators:

- percent of Nova Scotians living below Statistics Canada's low income cut off
- percent of Nova Scotians reporting food insecurity in the Canadian Community Health Survey (CCHS)
- cost, in Nova Scotia, of Health Canada's National Nutritious Food Basket.

What's happening now?

In 1998, Canada launched a national plan of action to achieve food security both here and internationally, in response to the World Food Summit held in Rome two years earlier. Canada's Action Plan for Food Security recognizes that poverty reduction, social justice and sustainable food systems are essential conditions for food security.

In Nova Scotia, the largest area of activity aimed specifically at increasing food security is co-sponsored by the Nova Scotia Nutrition Council and the Atlantic Health Promotion Research Centre. These two organizations, with a long list of partners, have conducted a series of projects aimed at increasing food security. Their current work includes:

- developing a model for ongoing monitoring of the cost of a nutritious diet in Nova Scotia
- supporting partners around the province in hosting community dialogues and forming local food security action groups

- developing a workbook and facilitator training program, aimed at helping communities take action to address food security
- producing a document that builds the case for a policy response to food insecurity
- developing a food security lens, a tool for use in assessing potential impacts of current or proposed policies on food security.

In addition, a few local or regional food security initiatives exist here and there around the province. Most often, these are associated with either schools or family resource centres. For example:

- In both the Annapolis Valley and Cumberland County, schools and food producers have joined forces to increase the sale of locally grown foods in school cafeterias. Students visit local food operations and participate in taste tests of local foods.
- The Lunenburg Queens Food Action Committee is raising awareness about food insecurity and working with the community to identify solutions.
- Community kitchens and low cost meal planning programs are offered by community-based organizations in a few areas.

Either regionally or provincially, Public Health Services is involved as a partner in one way or another in most of these initiatives.

Several organizations are addressing food security from the perspective of food production, for example:

- ACORN, the Atlantic Canada Organic Regional Network, promotes food security by supporting organic growers in the region, with a variety of initiatives.
- The Ecology Action Centre's Food Action Committee aims to increase food access and self-reliance in Nova Scotia. Promoting the consumption of locally grown food is a priority.
- The Taste of Nova Scotia Society, a group of restaurant owners, promotes the use of locally produced food in restaurants province-wide.
- The Taste of Nova Scotia Quality Food Program, an association of local food producers and processors, initiates joint marketing initiatives to promote the use of locally produced foods.
- Community supported agriculture programs, offered in a few areas, support local agriculture by connecting consumers directly to producers.
- Sobeys promotes foods grown in Atlantic Canada through signs, supermarket tours and cooking classes.

Next Steps

- Establish a provincial system to monitor food insecurity.
- Promote the use of the food security policy lens for assessing the impact of policy and budgetary decisions on food security.
- Increase public awareness of the extent and reality of food insecurity.
- Include food security in the curricula of health and education professionals.
- Advocate for public policies that increase the affordability of locally produced food.
- Advocate for public policies that support local food production and distribution systems.
- Advocate for municipal and provincial policies that permit the use of land for community gardens.
- Advocate for public policies that increase the use of locally produced foods in publicly funded institutions.

Potential partners

Achieving food security objectives will require working with a variety of partners, in addition to those currently involved in the Healthy Eating Action Group. Health and nutrition-related organizations from the government, non-government and private sectors should be involved, as well as new partner organizations concerned with income adequacy, social justice and the sustainability of food production.

A formal partnership to address food insecurity currently exists among the Atlantic Health Promotion Research Centre, the Nova Scotia Nutrition Council, and the province's family resources centres (specifically, those funded through CAPC and CPNP). Health Canada, provincial departments of health and of community services, Public Health Services in some districts and several universities are also involved. This partnership should be supported and maintained.

The following organizations concerned with income adequacy and social justice are suggested as potential new partners:

- Canadian Centre for Policy Alternatives - Nova Scotia
- Food Security Action Group, Oxfam Halifax
- Human Resources and Social Development Canada
- Nova Scotia Association of Social Workers
- Nova Scotia Department of Community Services
- Nova Scotia Human Rights Commission
- Nova Scotia Public Interest Research Group.

The following organizations concerned with the sustainability of food production are also suggested as potential new partners:

- Agriculture and Agri-Food Canada
- Atlantic Canada Organic Regional Network (ACORN)
- Food Action Committee, Ecology Action Centre in Halifax
- Nova Scotia Department of Agriculture and Fisheries
- Nova Scotia Federation of Agriculture
- The Taste of Nova Scotia Society
- The Taste of Nova Scotia Quality Food Program

A Call to Action

The publication of Healthy Eating Nova Scotia is only one step in a province-wide process to improve the nutritional status of Nova Scotians. This process, initiated by an intersectoral partnership, has identified four priority areas for action and 12 objectives:

Breastfeeding

1. To increase initiation and duration of breastfeeding.
2. To increase the number of health care organizations that have adopted the Ten Steps to Successful Breastfeeding.
3. To increase the number of public and community health agencies that have adopted the Seven Point Plan for Protection, Promotion and Support of Breastfeeding.

Children and Youth

4. To improve eating patterns of children and youth, based on Canada's Food Guide to Healthy Eating.
5. To increase the availability and affordability of healthy foods in child care, school and other child and youth settings.
6. To increase knowledge about food and nutrition among parents, teachers and caregivers.
7. To increase skills for encouraging the development of healthy eating practices in the early years, among parents and other caregivers of young children.

Fruit and Vegetable Consumption

8. To increase consumption of fruit and vegetables among all Nova Scotians.
9. To increase the availability of fruit and vegetables in community, work, school and health care settings.
10. To improve access to and affordability of fruit and vegetables for low income populations.

Food Security

11. To increase the proportion of Nova Scotians who have access to nutritious foods.
12. To increase the availability of nutritious, locally produced foods throughout the province.

The development of a provincial plan for implementing the strategy is well underway. The next step will be the development of local action plans, and action plans for each of the four priority areas. Although the four priorities have each been addressed individually in this document, the areas of overlap are numerous. A close examination of the objectives, the settings and the proposed partners illustrates this overlap, which in many cases also echoes themes in the provincial tobacco, physical activity and chronic disease prevention strategies. This convergence, if well coordinated, can result in a strong, concerted movement for change.

The Healthy Eating Action Group therefore offers the following overall recommendations:

Recommendations - Leadership

Members of the Healthy Eating Action Group are currently preparing a comprehensive plan to support implementation of *Healthy Eating Nova Scotia*. This implementation, however, cannot occur without adequate resources and provincial leadership. The Healthy Eating Action Group therefore makes the following recommendations:

1. The Healthy Eating Action Group recommends that the Office of Health Promotion and all Alliance member organizations endorse the four priorities and 12 objectives of Healthy Eating Nova Scotia, and take concrete steps to support these within their organizations.
2. To ensure coordination and reduce duplication, the Healthy Eating Action Group recommends that the Office of Health Promotion:
   - 2.1 act as lead agency for coordination of activities to achieve these objectives
   - 2.2 create one additional position for a public health nutritionist in each district health authority, to ensure coordination and support at the local level
   - 2.3 support shared ownership and accountability for Healthy Eating Nova Scotia, by maintaining the Healthy Eating Action Group as the coordinating body for the strategy
   - 2.3 establish a formal link between this coordinating body and the Office of Health Promotion Advisory Committee.
3. The Healthy Eating Action Group recommends that the Office of Health Promotion and all Alliance members allocate appropriate resources to support implementation and evaluation of the healthy eating strategy.

Recommendations - Public Policy

4. To ensure that food security is a consideration in all public policy decision making, the Healthy Eating Action Group recommends that the Government of Nova Scotia adopt the food security policy lens for use across government departments.
5. The Healthy Eating Action Group also recommends that the Office of Health Promotion work with partners to develop food and nutrition policy frameworks for food service operators in publicly funded institutions, such as schools, hospitals and post-secondary institutions.

Recommendations - Knowledge Development and Translation

6 The Healthy Eating Action Group recommends that the Office of Health Promotion develop an evaluation framework for Healthy Eating Nova Scotia.

7 To ensure that the proposed national food and nutrition surveillance system addresses the four priority areas, the Healthy Eating Action Group recommends full provincial participation in the development of this new national system.

8 The Healthy Eating Action Group recommends the development of a strategic research agenda, to engage researchers, institutions and agencies in working collaboratively on each of the four healthy eating priorities.

9 To increase the use of evidence in implementation of the strategy, the Healthy Eating Action Group recommends that the Health Promotion Clearinghouse be used to communicate the following types of information to stakeholders province-wide:

9.1 results of relevant Nova Scotia research, surveillance and evaluation

9.2 best practices in policies, programs and other initiatives that promote healthy eating.

Recommendations - Health Communications

10 To support implementation of *Healthy Eating Nova Scotia*, the Healthy Eating Action Group recommends that the Office of Health Promotion work with partner organizations to:

10.1 develop clear and consistent nutrition messages

10.2 implement a communication and social marketing strategy based on these messages.

Recommendations - Community Development and Infrastructure

11 The Healthy Eating Action Group recommends that the Office of Health Promotion engage provincial stakeholders from multiple sectors to develop action plans for each of the four priority areas, with shared accountability for implementation.

12 The Healthy Eating Action Group further recommends that Public Health Services take the lead in developing strategic partnerships for implementing *Healthy Eating Nova Scotia* in each health district.

13 To support the implementation of Healthy Eating Nova Scotia at the community level, the Healthy Eating Action Group recommends that the Office of Health Promotion and other Alliance members:

13.1 provide opportunities for staff and volunteers to learn more about strategies for health promotion and program evaluation

13.2 create a long-term fund to support local community-based projects that reflect best practices in the priority areas.

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